

REMARKS/ARGUMENTS

Claims 1-7, 10, 11, 15-17, 19 and 21-22 are active in this application.

Claim 21 remain withdrawn.

Support for the amendment to Claim 1 and claim 22 is found in the specification on page 2, line 25 to page 3, line 34.

As described in the application, the invention provides a process which permits the continuous chromium-free coating of pipe. In this process, the coating is achieved by what is referred to as a "whirl sintering tank" that permits the avoidance of powder accumulations above the pipe and shortage of powder underneath the pipe in the tank.

As discussed in the specification on page 3, lines 15-20, a fluidized-bed coating basin including an air-flush system above the pipe for eliminating powder accumulations and metal flow-guide panels below the pipe for eliminating powder deficits and any resultant pores on the underside of the pipe. Pipes having uniform layer thickness, both radially and axially, can be reliably produced when the fluidized-bed coating basin contains such devices.

The claimed process, which utilizes such a fluidized bed apparatus coupled with the chromate free coating and the frequency of induction coil is not described nor suggested by the art cited in the Office Action. Further details follows.

In the Office Action, the Examiner has rejected the claims as being obvious in view of the previously cited Questi, Winkle, Creps and Facer publications in view of the newly cited Kamimura patent (U.S. patent no. 3,616,983). The Examiner cites to this Kamimura patent because it is cited by Questi in col. 4, lines 64-65 as a known and useful powder coating process. However, the Examiner's reliance on this Kamimura patent is misplaced because the Kamimura patent does not, in fact, describe or suggest the limitations that define the "whirl sintering tank, "i.e.,

in a fluidized-bed coating basin comprising an induction coil incorporated in said fluidized-bed coating basin, an air flush system positioned above the pipe to eliminate powder accumulation and one or more metal flow-guide panels positioned below the pipe to eliminate powder deficit and resultant pores on the underside of the pipe

Specifically, Kamimura describes several embodiments for coating pipes in Figures 5-9. In Figures 5, 6 and 7, air sprays are used and in Figures 8 and 9 fluidized-type bed coating is used. These are different and Kamimura makes it clear that they are different (see col. 3, lines 41-44). In the air spray embodiments the spray guns can be positioned at different positions (pointing downward and upward)--see Figs 5, 6, and 7. In the embodiments where fluidized beds are used (Figures 8 and 9), the "powdery plastics will be blow upwardly and thus fluidized (see col. 4, lines 9-10 for Fig. 8 and col. 4, lines 34-36 for Fig. 9). Thus, if one used the Kamimura's teachings in the Questi process, one would choose between air spray applications or fluidized beds and in doing so would not achieve a "whirl-sintering tank" because, as noted, the fluidized bed is achieved only by upward air flow.

Withdrawal of this rejection is requested.

The Examiner has also rejected the claims as being obvious in view of Church in view of Winkle or Creps. The rejection has been maintained primarily because Church describes a fluidized bed process and the rejection points to two specific portions of the Church publication as teaching the claimed process. Specifically, in col. 3, line 68 through col. 4, line 8, Church discusses using a flow of air or gas to enter the chamber "upwardly through the foraminous plate 12," which the Examiner alleges is the same as the metal flow-guide panels in the claims. In col. 4, lines 29-32 Church states "A downwardly directed conduit (not shown) may also be affixed to the lower (solids) discharge of cyclone 26 to communicate with the interior of tank 10 and reintroduce collected fine solids back into the

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fluidized bed." This is the disclosure that the Examiner points to for the "air flush system above the pipe."

However, reliance on these teachings in Church is misplaced. Indeed, a careful reading of Church with reference to Fig. 1 shows that a pipe could be attached to the tapered bottom portion of the cyclone 26 and Church provides no indication for where those fine solids would be introduced into the tank (i.e., it could be on the side, on the top, and/or on the bottom). Therefore, if one were to reintroduce solids back to the bed, one would do so towards the bottom of the device, particularly, in view of Church's discussion in col. 4, lines 27-28 in which it is taught that the process should be carried out so that the particles settle to the bed to avoid particles being carried to the cyclone 26 and Church's discussion in col. 5, lines 17-24, where it is taught that air is designed to flow upward to elevate the fluidized bed. Clearly this arrangement in Church would not be the same as a whirl sintering tank (defined as noted above), it would appear that the Examiner has taken the position that what the air-flush system does in conjunction with the flow-guide panels is not specifically defined in the claims. This has been addressed by stating that these two components eliminate accumulations of powder above the pipe and below the pipe.

Withdrawal of this rejection is requested.

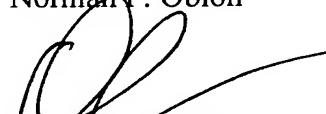
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A Notice of Allowance for all pending claims is earnestly solicited.

Should the Examiner deem that any further action is necessary to place this application in even form for allowance, she is encouraged to contact Applicants' undersigned representative.

Respectfully submitted,

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